PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference PCT-A0514-00	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/JP2005/004825	International filing date *(day/month/year)* 17 March 2005 (17.03.2005)	Priority date *(day/month/year)* 24 March 2004 (24.03.2004)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant KISSEI PHARMACEUTICAL CO., LTD.		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

   - ☒ Box No. I — Basis of the report
   - ☐ Box No. II — Priority
   - ☒ Box No. III — Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
   - ☐ Box No. IV — Lack of unity of invention
   - ☒ Box No. V — Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
   - ☐ Box No. VI — Certain documents cited
   - ☐ Box No. VII — Certain defects in the international application
   - ☐ Box No. VIII — Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 26 September 2006 (26.09.2006)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Yoshiko Kuwahara e-mail: pt07@wipo.int

Form PCT/IB/373 (January 2004)

PATENT COOPERATION TREATY

TRANSLATION

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

	Date of mailing *(day/month/year)*
Applicant's or agent's file reference PCT-A0514-00	FOR FURTHER ACTION See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/JP2005/004825	17.03.2005	24.03.2004

International Patent Classification (IPC) or both national classification and IPC

Applicant
KISSEI PHARMACEUTICAL CO., LTD.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I — Basis of the opinion
- ☐ Box No. II — Priority
- ☒ Box No. III — Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV — Lack of unity of invention
- ☒ Box No. V — Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI — Certain documents cited
- ☐ Box No. VII — Certain defects in the international application
- ☐ Box No. VIII — Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/JP	Authorized officer
Facsimile No.	Telephone No.

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/JP2005/004825

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).

2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

☐ a sequence listing

☐ table(s) related to the sequence listing

b. format of material

☐ in written format

☐ in computer readable form

c. time of filing/furnishing

☐ contained in the international application as filed.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/JP2005/004825

Box No. III **Non-establishment of opinion with regard to novelty, inventive step and industrial applicability**

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application

☒ claims Nos. 11

because:

☒ the said international application, or the said claims Nos. 11
relate to the following subject matter which does not require an international preliminary examination (*specify*):

The subject matter of claim 11 relates to a method for treatment of the human body by therapy, which does not require an international preliminary examination by the International Preliminary Examining Authority in accordance with PCT Article 34(4)(a)(i) and Rule 67.1(iv).

☐ the description, claims or drawings *(indicate particular elements below)* or said claims Nos. _____
are so unclear that no meaningful opinion could be formed (*specify*):

☐ the claims, or said claims Nos. _____ are so inadequately supported by the description that no meaningful opinion could be formed.

☒ no international search report has been established for said claims Nos. 11

☐ the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:

the written form
- ☐ has not been furnished
- ☐ does not comply with the standard

the computer readable form
- ☐ has not been furnished
- ☐ does not comply with the standard

☐ the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-*bis* of the Administrative Instructions.

☐ See Supplemental Box for further details.

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/JP2005/004825

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement -

Novelty (N)	Claims	1-10	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	1-10	NO
Industrial applicability (IA)	Claims	1-10	YES
	Claims		NO

2. Citations and explanations:

Document 1: JP, WO, 2003-024916, A1 (Kissei Pharmaceutical Co., Ltd.), 27 March, 2003 (27.03.03)
Document 2: WO, 02-069906, A2 (CELL-EGY Pharmaceuticals, Inc.), 12 September, 2002 (12.09.02)
Document 3: WO, 00-02846. A1 (Kissei Pharmaceutical Co., Ltd.), 20 January, 2000 (20.01.00)
Document 4: JP, 2001-288115, A (Yamanouchi Pharmaceutical, Co., Ltd.), 16 October, 2001 (16.10.01)
Document 5: JP, 2003-55261, A (Plizer Products Inc.), 26 February, 2003 (26.02.03)
Document 6: JP, 2001-114679, A (Yamanouchi Pharmaceutical, Co., Ltd.), 24 April, 2001 (24.04.01)

Claims 1-10

The subject matters of claims 1-10 do not appear to involve an inventive step in view of documents 1-6 cited in the ISR.

Document 1 describes an anti-(interstitial) cystitis drug in combination of an α-adrenoreceptor antagonist (prazosin, terazosin etc.) with a β-adrenoreceptor agonist (especially see paragraphs [0006], [0031], [0032], [0045] and [0046]). There is found no difference between the inventions described in document 1 and the subject matters of claims 1-10 in the diseases to be cured, taking the followings into consideration;

(1) Paragraph [0006] in document 1 describes concretely frequent urination as the cystitis symptoms to be cured,

(2) Paragraph [0023] in the specification of the application concerned also describes "for prevention or therapy of frequent urination or urinary incontinence accompanied by acute or chronic cystitis, chronic or acute prostatitis etc.," and

(3) It is a common general technical knowledge that relationship between cystitis and frequent urination or urinary incontinence is widely recognized.

On the other hand, documents 2 and 3 describe that a phenoxyacetic acid derivative represented by the formula (I) is effective in stimulating a β3-adrenoreceptor and is useful as a preventive or therapeutic agent for diseases such as frequent urination, urinary incontinence etc. Moreover document 2 (page 4, line 33 to page 5, line 9) suggests that the phenoxyacetic acid derivative is utilized together with an α1-adrenoreceptor angtagonist. Therefore, a person skilled in the art could have easily employed the phenoxyacetic acid derivative described in documents 2 and 3 as a β-adrenoreceptor antagonist in the invention described in document 1. The β-adrenoreceptor antagonist is an ingredient of a drug for urinary and reproductive organ diseases, e. g. cystitis etc., including frequent urination and urinary incontinence. Furthermore, documents 4-6 describe tamusulosin, naphthopidil etc. as an α-adrenoreceptor antagonist that is useful as a therapeutic agent.

for diseases in the urinary and reproductive organs. So, in the invention described in document 1, a person skilled in the art could have adequately conceived of employing tamsulosin, naphthopidil etc. described in documents 4-6 as an α-adrenoreceptor antagonist. The α-adrenoreceptor antagonist is an ingredient of a drug for diseases in such urinary and reproductive organs such as cystitis etc.

In addition, the specification of the application concerned only discloses that tamsulosin chlorate or sirodosin has the effect of lowering the bladder internal pressure and of extending the interval between urinations when it is selected as an α1-adrenoreceptor blocking agent and is combined with a phenoxyacetic acid derivative represented by the formula (I). It cannot be ascertained whether another typical α1-adrenoreceptor blocking agent has effects equal to the above or not when being selected. Moreover, given the descriptions in the specification of the application concerned, it cannot be also ascertained whether the effects of lowering the bladder internal pressure and of extending intervals between urinations attribute to a mere additive effect or a synergistic effect in combination of two ingredients. Accordingly, considering the inventions described in documents 1-6, the effects presented by the subject matters of claims 1-10 are not recognized to be unpredictable and particularly remarkable for a person skilled in the art.